ABSTRACT

A method of fast dynamic channel allocation call admission control for radio link addition includes a pre-code allocation process, a signal-independent code allocation process, and a post-code allocation process. The pre-code allocation process receives and processes a request message, retrieves the new cell identification from the message, and retrieves the old cell identification and system information from a centralized database. The code allocation process checks the availability of a code set in the new cell, generates timeslot sequences for the available timeslots, and assigns a code set to the available timeslots in a timeslot sequence, wherein a successful assignment is a solution. The interference signal code power (ISCP) is calculated for each solution and the solution having the lowest weighted ISCP is selected as an optimal solution. The post-code allocation process stores the new radio link information in the database and creates a response message with new allocation information.